



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,358	10/25/2000	Toshiyasu Kitamura	33082	4607

116 7590 10/22/2003

PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER:

PAN, YUWEN

ART UNIT	PAPER NUMBER
----------	--------------

2682

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,358

Applicant(s)

KITAMURA ET AL.

Examiner

Yuwen Pan

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 7/25/03 have been fully considered but they are not persuasive.

The applicant argues that Kenmochi fails to teach that rib is provide upright on said shielding case in such manner that a surface that contacts said printed circuit board contacts in the full and tight adherence. The examiner disagrees, because figure 5 and 8 clearly demonstrates item 8 contacts the printed circuit board, item 1, in full and tight adherence. By inverting these figures about a horizontal axis such that they are illustrated in customer or face up orientation, the rib, item 8 illustrated as being disposed upright on the shielding case, item 9. Clearly, the resin spacer must be secure on the print board such that it would be able to support the press from the key skirt, item 3.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kenmochi (US005664667A).

With respect to claim 1, Kenmochi discloses a keybutton illuminating device for a key button structure comprising:

A case (see figure 5 and column 1 and line 9-14);

A shielding case that is provided with metal surface treatment (see figure 5 and item 9, column 5 and line 20-21);

A key button (see figure 5 and item 3a);

A printed circuit board that is mounted with a light emitting element (see figure 5 and items 1 and 2, column 3 and line 65-column 4 line 1);

Wherein said light emitting element is surrounded entirely by a rib provided with metal surface treatment, (see figure 5 or 8 and item 8) the rib being disposed underneath said shielding case (see figure 5 and item 9, column 2 and lines 26-38).

With respect to claim 2, Kenmochi discloses a keybutton illuminating device for a key button structure comprising:

A case (see figure 5 and column 1 and line 9-14);

A shielding case that is provided with metal surface treatment (see figure 5 and item 9, column 5 and line 20-21);

A key button (see figure 5 and item 3a); a printed circuit board that is mounted with a light emitting element (see figure 5 and items 1 and 2, column 3 and line 65-column 4 line 1);

Where said light emitting element is surrounded entirely by a rib (see figure 5 or 8 and item 8) that is provided underneath shielding case in such manner that a surface that contacts said printed circuit board contacts in a full and tight adherence (see figure 5 and column 5 and line 54-60).

With respect to claim 4, Kenmochi discloses a keybutton illuminating device for a key button structure comprising:

A case (see figure 5 and column 1 and line 9-14);

A shielding case that is provided with metal surface treatment (see figure 5 and item 9, column 5 and line 20-21);

A key button (see figure 5 and item 3a) for switch actions of contact patterns that are print-wired on both side of light element (see figure 5 and item 1a); a printed circuit board that is mounted with a light emitting element (see figure 5 and items 1 and 2, column 3 and line 65-column 4 line 1);

A shielding case for holding of a skirt part of said keybutton is disposed upright on printed circuit board in such manner as to surround said light emitting element and said contact patterns and by the wall of said shielding case reflects light beams that are emitted from said light emitting element (see figure 5 and column 5 and lines 11-31).

With respect to claim 5, Kenmochi further discloses the surface of the plastic dome sheet and electrically conductive light-reflecting layer comprised of a metallic membrane or the like having a high reflectance (see column 5 and line 11-15).

With respect to claim 6, Kenmochi discloses a wireless communication terminal that is equipped with a keybutton illuminating device for a key button structure (see column 1 and line 9-14) comprising:

A case (see figure 5 and column 1 and line 9-14);

A shielding case that is provided with metal surface treatment (see figure 5 and item 9, column 5 and line 20-21);

Art Unit: 2682

A key button (see figure 5 and item 3a);

A printed circuit board that is mounted with a light emitting element (see figure 5 and items 1 and 2, column 3 and line 65-column 4 line 1);

Wherein said light emitting element is surrounded entirely by a rib portion of the shield case that is provided with the metal surface treatment, the rib being disposed upright on said shielding case (see figure 5 and item 9, column 2 and lines 26-38).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi (US005664667A) in view of Maeda (US005740543A).

With respect to claim 7, Kenmochi discloses an analogous device as cited in claim 6. Kenmochi does not disclose key button is operated when there is a need for a voice memo operation for recording of the contents of present vocal communication, wherein light emitting element comes to illuminated or blink on start of the voice memo operation.

Maeda discloses key button is operated when there is a need for a voice memo operation for recording of the contents of present vocal communication (see column 3 and lines 43-50).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Maeda with Kenmochi's device, such that a portable terminal device has more features such as voice memo and recording during conversation.

Art Unit: 2682

The examiner takes "Official Notice" of the fact that is notoriously well-known in the art blink or illuminating on start of voice memo operation, in order to have an indication to a user.

Therefor, it would have been obviously to one ordinary skill in the art at time the invention was made to combine blink or illuminating on start of voice memo operation within the memo operation key button to have an indication to the user.

With respect to claim 8 and 9, the examiner takes "Official Notice" of the fact that is notoriously well-known in the art blink or illuminating on start of voice memo operation or during communication, furthermore having different manner of blink or illuminating for different mode, such as calling or recording, in order to have an indication of present mode to a user.

Therefore, it would have been obviously to one ordinary skill in the art at time the invention was made to combine blink or illuminating on start of voice memo operation within the memo operation key button to have an indication of present mode to a user.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi (US005664667A).

Kenmochi doesn't disclose a rib around the light source in an approximately oval shape. The examiner takes "Official Notice" that it is notoriously well known in the art to assert the shape of the insulating resin sheet spacer in order to install the component easily. The shape of the spacer could be circle and square based on the manufactures.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to assert the shape of insulating resin sheet spacer to easily install the insulating resin sheet spacer.


Conclusion


Art Unit: 2682

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Yuwen Pan
October 2, 2003


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600